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CENTRAL INTELLIGENCE AGENCY

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Comment:

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1. Read PORAY-KOSHITS for PORAI-KOSHITS in Paragraph 11.

2. Professor VOROZHTSOV, referred to in Paragraph 11, died c.1943.

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THIS IS UNEVALUATED INFORMATION

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CONTRIBUTIONS OF THE GERMAN SPECIALIST GROUP IN THE INDANTHRENE FIELD AT NIOPiK, RUBEZHNOYE

1. between 1945 and 1951 certain aspects of Soviet research and development in the field of synthetic dyestuffs. The main mission of the German group in the NIOPiK laboratory in Rubezhnoye was the technical and scientific development of methods necessary for the manufacture of indanthrene dyestuffs. The German specialists, because of the hasty, haphazard way in which they were deported, did not bring with them any scientific data or material on this subject; nor did the original Soviet plans call for the placement of the Germans in this specific field of research. Apparently, the Soviets already performed some research and preliminary work on the indanthrene dyestuffs before the Germans arrived but were stymied by lack of initiative and technical know-how. This initial work was performed before the war in the NIOPiK laboratory in Moscow and these developments were apparently based on scientific publications and the available standard literature.

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The main source of information in the field of dyestuffs in the USSR was the Soviet dismantling and copy program conducted in the East German chemical plants immediately after the end of World War II,

where a great variety of dyestuff manuals and literature was made available. 50X1

2. The work of the German specialists in the field of dyestuffs pushed Soviet development in that field considerably forward. There is certainly no doubt that the Soviets could have carried out this research and development themselves and even have brought it to a production phase merely by working with the copied and confiscated manuals and literature they took from Germany. Without the help of the Germans, however, the development work in this field would probably have stretched an additional two years, assuming of course that the same number of Soviet chemists would have been made available on the project as were Germans.

3. As mentioned above, the German specialists brought no literature nor any specific background material with them when they came to the USSR; hence, they were forced to work themselves into this field with little or no basic aid. In addition, most had little skill in indanthrene dyestuff research, but before long worked 50X1-HUM into the routines and were actually operating smoothly. The Soviets were satisfied and this whole peculiar situation may have ev 50X1-HUM been premeditated, just to see how the specialists operated under difficult conditions. were in no way rushed nor was it in any way indicated that speed in our work was necessary. were given more 50X1-HUM or less a free hand in the carrying out of research.

4. Soviet counterparts would have had much more benefit had they heeded the specialists' suggestions and advice in the 50X1-HUM performance of our assigned missions. When Germans were called 50X1-HUM upon to work together with the production people in an advisory capacity, it was generally evident that the working out of detailed laboratory or testing procedures was carried out in a slipshod, haphazard method without care or precision. The results of the work performed under these conditions were turned over to the production phase without further scrutiny or test in the laboratory. The Soviets purposely spent more time than was necessary in supposed observation, in changing original procedures and injecting what they called improvements.

5. In the field of indanthrene dyestuffs, the German contribution to the Soviet research and development effort was not only the working out of new specifications but also the introduction of new working methods and the training and indoctrination of young Soviet chemists and technicians. My Soviet group chief, PLAKIDIN, a young and ambitious chemist; 50X1-HUM Of course several dyestuffs products were developed by Soviet chemists alone, but these were insignificant in number. It is hardly possible to speak of any original Soviet developments or the introduction of new fields. The Soviets attempted to copy several important dyestuff types of the indanthrene class which were already in the world markets. In the azo dyestuff class there were several products even before the war which apparently deviated, if only slightly, from com- 50X1-HUM mercial dyestuffs, but these were few and far between and could not be considered of high quality. the most important factors missing in the USSR were tradition and experience. Soviet 50X1-HUM chief, PLAKIDIN, in requesting a detailed report on some work, explained, "You must consider that in Germany you have a 50-year-old tradition to fall back upon, whereas we are only starting."

6. In the field of indanthrene dyestuffs the Soviets apparently accomplished what they had planned. By 1951 several important dyestuff products were ready for the production phase. From information [redacted] from the USSR [redacted] 50X1-HUM it seems that the Soviets released several of these dyestuff products to the Balkan markets. Hints in letters [redacted] have made it evident that after the majority of the German scientists were repatriated in June 1951 further progres 50X1-HUM by the Soviets was seriously hindered.

7. In 1951 when the production of the highly valued indanthrene dyestuff started, the USSR celebrated this event with compliments and praises of the magnificent strides Soviet science had accomplished. The technical chief of the NIOPiK laboratory, the Soviet administration of the Khimkombinat, and the chiefs of the dyestuff production plants all shared in the Stalin prize which was presented as the result of their work in this field. The work of the German specialists, however, was not even mentioned in the citation. The prize was awarded for work conducted on dyestuffs which were already on the world market.

8. Any direct interference by supervisory personnel in the work progress of the German specialists was unknown [redacted] except of course in the 50X1-HUM case of any deviation from the work patterns or methods that they themselves introduced. Nor were Soviet methods or literature in any way more preferred than [redacted] publications or manuals. It did not 50X1-HUM seem [redacted] that persons who were ideologically inclined were preferred in vital scientific positions over the persons who were technically better suited.

9. In the years between 1949-1951 it seemed that all available specialist personnel were put to work in the field of indanthrene dyestuffs. This was the priority project, and all effort was exerted in its accomplishment regardless of expense. In this connection, [redacted] not 50X1-HUM know whether or not other projects suffered as a result of the pressure put onto the priority projects.

10. The indigenous manufacture of indanthrene dyestuffs is of course of prime importance. These dyestuffs are especially vital in the dyeing of cotton. The USSR has attempted to break away from dependence on the import of these valuable chemical products, not only because of the duty, but also (probably the prime reason) for the purpose of being able to supply the Eastern bloc nations and to dominate the Asiatic markets. [redacted] 50X1-HUM Soviet industry will not reach the high quality standards which German industry had and has. In spite of continued warnings on the part of the German specialists that the preservation of quality was of the utmost importance, the Soviet attitude of quantity over quality predominated.

11. It can be safely stated that before the first World War, Russian chemists definitely contributed toward research and development in modern chemistry. Of course in those days they worked in close cooperation with the scientists of the [redacted] world, and it was 50X1-HUM mandatory that their education be more fully rounded out by attendance at [redacted] universities. In spite of this broad scientific 50X1-HUM intercourse, Russian chemical advancements were not as world shaking as the Soviets would lead us to believe today; the contributions

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that they made were just a part of the great mosaic in the chemical industry. Even today, the USSR has scientists who make the dyestuff field their particular specialty: professors VOROZHTSOV, PORAI-KOSHITS, RADIONOV, BOGDANOV, STEPANOV, and others. However, as far as can be estimated from literature, their talents and potential capabilities are so hampered by political influence, that they cannot devote their minds to sound objective reasoning and exploitation of new fields. Even the technical literature reflects the Party line. The standard higher educational institutions - produce only mediocre new chemists, and only a very small number of these young graduates bring themselves to a point where they can favorably be compared with their counterparts. This is 50X1-HUM
accomplished, however, only after long and tedious work and study on the part of the individual on his own time. The limitations of Soviet research in the field of dyestuff chemistry, 50X1-HUM
are insufficient new chemists, lack of tradition and experience, and the limitation of personal initiative by the state's interference in the progress of normal work. list the advantages as 50X1-HUM
being the Soviets' gift in the art of improvisation, and the persistence and ability to copy foreign inventions. Soviet research and development in the field of dyestuffs will never pass the 50X1-HUM
world's because of its laboring, stumbling pace, and its principle of quantity over quality.